

B¹ wherein the foamed composite building material formed thereby has a specific gravity of about 1.07 g/cc or less.--

Please add the following new claims 24-25:

B² --24. (New) The method of claim 15, wherein said foamed composite building material is capable of having a screw fastener countersunk therein without predrilling.

25. (New) The method of claim 16, wherein said polymeric resin is polyvinyl chloride (PVC).--

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SUPPORT FOR AMENDMENTS

Claims 15-17, 21 and 23-25 are now active in this application. Claim 15 has been amended to specify that process forms a composite having a specific gravity of about 1.07 g/cc or less. Further, new claims 24-25 have been added to specify that the composite material formed by the process is capable of having a screw countersunk therein without predrilling (claim 24), and to specify that the polymeric resin is PVC (claim 25). These amendments are supported by the specification, and particularly the Examples as shown in Table 1. No new matter has been added by this amendment.

REQUEST FOR RECONSIDERATION

The present invention relates to a process for forming a foamed composite building material that provides a combination of unique properties, particularly for a PVC based composite. In particular, the process requires compounding a polymeric resin (such as PVC), fiber (such as wood fiber or wood flour) and a blowing agent, (and optionally an acrylic modifier), then feeding the compounded mixture into an extruder to form a molten mixture. The molten mixture is then extruded through a die to form the composite building material,

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with the resulting composite building material having a specific gravity of about 1.07 or less.

The blowing agent is required to be present in an amount of from about 0.5 to 1.5 parts per hundred parts of polymeric resin.

Applicants have found that by feeding the required components into the extruder and extruding the resulting molten mixture, the combination of amount of blowing agent and specific gravity of the resulting composite, provides the resulting building material with superior properties, such as the ability to countersink a screw in the product without predrilling.

The claims stand rejected under 35 U.S.C. 103 over Cope. As noted in the parent application (now U.S. 6,344,268), Cope does not disclose or suggest a process for producing a building material as required in the present claims. In particular, while Cope contains claims that encompass using 0.2-5 parts (by volume) of a blowing agent, none of the examples in the reference show the use of the required 1.0 to 1.5 parts of blowing agent. Further, the only examples in the reference use 0.2-0.8 parts per hundred parts resin of the blowing agent, significantly outside the range of the present claims. (Applicants note that the claims of Cope denote 0.2 to 5 parts by volume. It is difficult to determine what this would translate to in terms of parts per hundred parts of resin). Even if one were to assume a 1:1 correlation between phr and parts by volume, there is no suggestion in Cope that requiring 1.0-1.5 phr of blowing agent would provide a product from their process with a specific gravity of 1.07 g/cc or less, or that such a specific gravity and amount of blowing agent in the process would provide any benefit in the product produced. Further, there is certainly no suggestion regarding these properties and their correlation to the ability to countersink a screw into the product without predrilling. The composition as defined in the present method claims is essentially the same as that allowed and issued in the parent application. As such,

it's manner of production is believed to be allowable also.

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As shown in the previously filed Declaration by David Stucky in the parent application, a copy of which is provided herewith for reference, the composition resulting from the present process provides surprising and significant improvements in the ability to countersink a screw when these blowing agent and specific gravity requirements are met. Such a relationship is nowhere disclosed or suggested by Cope. Accordingly, the reference cannot render the claims obvious. Even if the Examiner maintains the position that the reference renders the claims obvious, the data provided in the copy of the Stucky Declaration adequately rebut such an asserted case of obviousness and the rejection should be withdrawn.

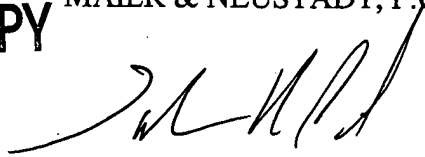
The Examiner has rejected the claims under 35 U.S.C. 112, second paragraph. This rejection is obviated by the above amendments and where not obviated is respectfully traversed. The Examiner indicates that it is unclear as to whether the "parts" indicated in the claims are by weight or by volume. As indicated in Table 1 on page 13 of the present application, the compositions are defined in both weight % and phr (part per hundred resin, a standard way of expressing compositions in the polymer industry). Those of skill in the art understand that phr is reported in parts by weight. This can also be readily determined by using the phr data provided in the table on page 13 by calculating the weight percentages directly from the phr values. As such, the claims are believed to be clear in the use of the term "parts per hundred parts polymeric resin". As such, the rejection should be withdrawn.

Applicants submit that the application is in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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